

**Five days
Faculty Development
Program
On
Next Generation Computing:
AI, Machine Learning, and
Block Chain**

(A part of ICADCML-2020)

23rd – 27th March 2020



**Coordinators
Dr. Asis Kumar Tripathy
Dr. Tapan Kumar Das**



VIT
Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

Organized by

**School of Information Technology
and Engineering,
VIT, Vellore**

ABOUT VIT

VIT was founded in 1984 as Vellore Engineering College by the Chancellor G. Viswanathan. From its humble beginning, the institution has grown exponentially to that of having more than 33,000 students. Students from all the states of India and from more than 50 countries are studying at VIT. University status was conferred in 2001 by MHRD Govt. of India in recognition of its excellence in academics, research and extracurricular initiatives. Currently, VIT has 4 campuses in Vellore, Chennai, Amaravati (AP) and Bhopal (MP). The National Institutional Ranking Framework (NIRF) of the MHRD, Government of India, has identified VIT as the best Private Engineering Institution in India in the year 2016, 2017, 2018 and 2019. VIT has been awarded as No.1 Private Institution for Innovation (ARIIA 2019 Award) by Govt. of India. VIT has gone for accreditation by NAAC [India], IET [UK], and ABET [USA] and follows world class academic processes. VIT is the first and only University in India to get 4-star rating from QS, the world universities ranking organization. Govt. of India recognizes VIT as an Institute of Eminence (IoE) in 2019 to become the world's best.

**SCHOOL OF INFORMATION
TECHNOLOGY AND ENGINEERING**

The School offers programs related to Information Technology, Software Engineering, Computer Applications and Domain Specific Applications. It imparts the knowledge and skills required for the students to become competent and excel in the broader domain of Information Technology and allied disciplines. The students are encouraged to work on challenging projects and given exposure to industry -

Oriented practices. The School focus is on holistic learning to help the students to make significant contributions to the Information Technology industry and to serve the society at large. The school has more than 4,800 students and 180 committed faculty members, apart from many visiting professors, working professionals from the industry and R&D organizations. The faculty members are highly motivated to do ground-breaking research and excel in teaching and learning processes. They provide opportunities for the students to apply the acquired knowledge for solving real-world problems and gaining undergraduate research experience. The placement record of the School is always impressive.

ABOUT THE FDP

This FDP designed with the state-of-the-art concepts of AI, Machine Learning, and Blockchain technology that comprises of theory as well as hands-on sessions. Half of the course is designed for theory, use-case demonstrations, and research oriented discussions, which will be helpful in understanding the process; and the remaining 50% course for practical implementation (hands-on). In brief this FDP covers AI, Machine Learning concepts, Types of Learning, Applications of Machine Learning, Deep Learning, Blockchain Theory-Distributed Ledger Technologies (DLT), Permissioned and Permissionless Blockchains, Model, framework, Blockchain network and architecture design, Blockchain consensus and fault tolerance mechanisms, Blockchain test-beds, platforms and simulations, Applications using or built on top of blockchains, Cryptographic algorithms and protocols, Security and reliability in Blockchain, Privacy and trust in blockchain, Blockchain applications in areas such as Internet of Things(IoT), IoT & blockchains.

TOPICS TO BE COVERED

The FDP aims to cover the following aspects of AI, ML, Block Chain

- ❖ Hypothesis Testing & Correlation
- ❖ Data Visualization: Matplotlib, Seaborn
- ❖ Machine learning and Applications
- ❖ Types of Learning
- ❖ Ensemble Learning Methods
- ❖ Overview of Blockchain
- ❖ Bitcoin Blockchain
- ❖ Ethereum
- ❖ Smart contracts on Private Ethereum Network
- ❖ Hyperledger
- ❖ Hyperledger Composer
- ❖ Blockchain on Multichain
- ❖ Blockchain Prospects

RESOURCE PERSON

Professional Trainers and Industry Consultants from Near and Learn Pvt. Ltd., BTM Layout, Bangalore (<https://nearlearn.com/>)

WHO CAN ATTEND?

The FDP provides unique opportunity of learning from professional trainers in the designated fields. Faculties and Research Scholars from technical institutions (VIT and other institutes) can participate.

HOW TO APPLY?

The number of participants is limited to fifty only based on first register first serve basis. Interested participants may register on the following link on or before 20-03-2020.

<https://forms.gle/8vTwMrDFPTzR59ZN8>

Participation confirmation will be sent through the registered email-id on 21-03-2020.

REGISTRATION FEE

There is **No Registration Fee** for the participants. However, working lunch and high tea will be served during all the days of the event. Accommodation will not be provided by the organizing committee.

PATRON

Dr. G. Viswanathan, Chancellor

CO-PATRONS

Mr. Sankar Viswanathan,

Vice-President

Ms. Kadhambari S. Viswanathan,

Assistant Vice-President

Dr. Anand A Samuel,

Vice-Chancellor

Dr. S. Narayanan,

Pro-Vice Chancellor

CONVENER

Dr. B K Tripathy,

Dean SITE

CO-CONVENERS

Dr. Jasmine Norman, HoD, IT, SITE

Dr. Agilandeewari L, HoD, DC, SITE

COORDINATORS

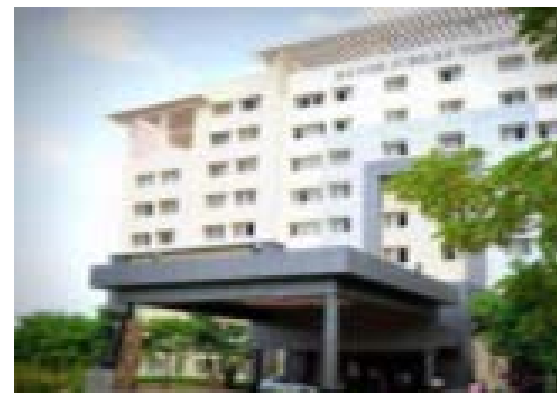
Dr. Asis Kumar Tripathy, SITE

Dr. Tapan Kumar Das, SITE

VENUE

SJT 107, VIT, VELLORE

Certificate of Participation will be issued to all the participants on completion of the FDP.



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